

MAINTENANCE TECHNICIAN 2

POSITION SUMMARY: This position is responsible for supporting City programs and functions by performing labor intensive work related to maintenance and repair of City infrastructure, facilities, grounds, and equipment, within the areas of public services and utility plants. Operate various types of equipment, tools, and vehicles. Routine and repetitive tasks may be carried out with minimal or no supervision. This position applies specific knowledge to analyze and respond to maintenance areas or concerns within established limits related to the employee's area of concentration.

SUPERVISION RECEIVED: Work is performed under the direction of the departmental supervisor or designee.

ESSENTIAL JOB FUNCTIONS: *An employee in this position may be called upon to do any or all of the following essential functions. These examples do not include all of the duties which the employee may be expected to perform. To perform this job successfully, an individual must be able to perform each essential function satisfactorily.*

1. Perform a variety of technical and complex maintenance related activities to public infrastructure and utility plants.
2. Perform all of the essential job functions of the maintenance technician 1 position.
3. Provide customer service, courteously respond to routine and non-routine inquiries, provide information within the area of assignment, and resolve complaints in an efficient and timely manner. Follow up within the scope of authority, make recommendations, and/or refer to a supervisor or department head as necessary.
4. Operate, maintain, and perform repair and preventative maintenance on department specific vehicles, equipment, and tools. Clean equipment and follow inspection and preventative maintenance checklists.
5. Prepare and provide information for records and reports including logs, documentation of work activities, and supply inventory within a computerized maintenance management system (CMMS) or other software systems. Use computers, associated databases, and software to research, complete, and document various tasks. This may include GPS or GIS systems.
6. Maintain a clean, safe, and professional work environment.
7. Assist with a variety of projects, public relations activities, and special department and City events.
8. Perform heavy manual labor.
9. Identify, locate, and mark underground utilities.
10. Perform snow removal, salting, and other winter maintenance using specialized winter maintenance equipment. Implement efficient routes and methods to improve performance and reduce costs.
11. Train, mentor, and lead seasonal employees by directing daily tasks, providing feedback, and advising supervisor of work performance. May lead and direct employees. May guide and monitor contractors.

12. Assist with and oversee projects; meet with project contractors and engineers.
13. Perform related work as required; may include assisting employees in a higher classifications in more complex assignments.

If assigned to public services, examples of work may include:

- Skilled work constructing, installing, inspecting, repairing, and maintaining water, storm, and sanitary sewer infrastructure assets such as manholes, catch basins, mains, laterals, services, hydrants, valves, lift stations, irrigation systems, and related underground infrastructure. Investigate and diagnose water, storm, and sanitary sewer infrastructure problems. Perform excavation, backfill, and compaction activities.
- Skilled work constructing, installing, inspecting, repairing, and maintaining roads, sidewalks, alleys, curbs, gutters, bridges, detention ponds, and other related above-ground infrastructure. Maintaining asphalt and concrete, trimming trees, removing brush, and performing associated surface restoration activities.
- Operate and perform light maintenance on tools and equipment used in infrastructure maintenance. Operate backhoes, loaders, hydro excavation equipment, dump trucks, generators, valve turners, and other infrastructure maintenance equipment.
- Collect water distribution samples and perform simple water distribution field tests; perform water service shut-offs, turn-ons and re-reads; install and repair water meters and associated water metering infrastructure.
- Safely perform infrastructure maintenance activities, including confined space and construction zone flagging.
- Interact with the public under extreme environments and circumstances including severe weather events and water and sewer related emergencies. Regularly enter residential, commercial, or industrial buildings to perform infrastructure maintenance.

If assigned to utility plants, depending on area of expertise, examples of work may include:

- Skilled work maintaining and repairing plant process, transmission equipment and infrastructure. This may include pumps, motors, valves, chemical feed systems, meters, air releases, blow-offs, hydrants, instrumentation, and related assets.
- Skilled work maintaining and repairing lift stations, collecting basins, clarifiers, and wet wells.
- Skilled work installing, diagnosing, programming, and repairing building automation HVAC system, and SCADA system.
- Skilled HVAC work installing, diagnosing, maintaining, and repairing make-up air units, powered roof ventilators, boilers, chillers, industrial dehumidifiers, humidifiers, compressors, and air conditioning.
- Skilled work calibrating, installing, diagnosing, and repairing flow meters, turbidimeters, level indicators, transmitters, scales, and chemical feed pumps. Test, diagnose, and repair circuit boards including capacitors, resistors, transistors, and fuses.
- Skilled mechanical work installing, diagnosing, and repairing plant and transmission equipment including large valves and valve actuators, air releases, hydrants, air intakes

and related assets. Design, fabricate, and construct components using welders, grinders, torches, saws, and benders.

KNOWLEDGE, SKILLS, AND ABILITIES: *The requirements listed below are representative of the knowledge, skills, abilities and minimum qualifications necessary to perform the essential functions of the position. A qualified individual with a disability must be able to perform the essential functions of the position with or without reasonable accommodation.*

- A. High school diploma or equivalent and five years of progressively responsible experience in field of maintenance, construction, or applicable field. A combination of education and experience may substitute for the five year requirement.
- B. Obtain and maintain lift truck, scissor lift, aerial lift, and other licenses and certifications as required.
- C. Possess a valid Michigan motor vehicle operator's license.
- D. Demonstrate proficiency in all duties of the maintenance technician 1 position in appropriate area of expertise.
- E. Possess thorough knowledge of the methods, materials, and equipment used in maintenance operations.
- F. Demonstrate a mechanical aptitude, good powers of observation, and able to troubleshoot.
- G. Able to work as a team and with minimal supervision. Able to make decisions according to appropriate rules, regulations, departmental policies, and procedures. Possess self-supervising attributes and a positive, congenial attitude.
- H. Able to establish effective working relationships and use tact, good judgment, and resourcefulness when working with staff, volunteer workers, other governmental agencies, and the public.
- I. Able to communicate effectively and prepare detailed and accurate work orders and other reports. Able to effectively present ideas orally and in writing for varied audiences.
- J. Able to follow established procedures and carry out complex instructions with minimal supervision. Able to diagnose, assess, and troubleshoot problems and take appropriate corrective action.
- K. Able to work effectively within deadlines, under stress, and with changing work priorities.
- L. Able to work various shifts and respond to call outs to provide proper coverage for all activities and events.
- M. Stay informed of new developments, current issues, and strategies through continued education and professional growth. Able to travel to various locations to attend training conferences and participate in other opportunities to stay current in the field.
- N. Able to use computers and software programs for work orders, infrastructure locating, and specialized applications. Able to learn additional programs as required.
- O. Able to read and interpret data, blueprints, sketches, diagrams, manuals, and control schematics.

- P. Knowledge of federal, state, and local standards and codes related to area of expertise and skill trade.
- Q. Able to learn and understand appropriate personal protective equipment and basic safety protocols. This may include chemical safety, traffic safety, basic electrical safety, and department specific safety procedures.

ADVANCEMENT CRITERIA: *Employees are expected to gain technical knowledge and field expertise and demonstrate an increasing level of proficiency in all aspects of assigned work. They must meet the expectations of the appraisal process and display good attitude and initiative in order to advance within this classification. Before reaching G step of the classification and salary schedule, employees must successfully complete the advancement requirements of G-K. Employees who fail to obtain these requirements will not advance past the F step; additionally, failure to maintain the required licenses and certifications of G-K will result in a salary reduction to F step.*

Public services—A-F classification requirements:

- Five years of construction experience or have attained at least the “F” step of the maintenance technician 1 classification.
- Possess the following licenses and certifications:
 - CDL-A with N endorsement or CDL-B with air brakes endorsement
 - Confined space certificate, Powered Industrial Truck (hi-lo) certification, and CPR certification
 - Certified backhoe operator training
 - Competent Person Training - Excavating and trenching certification
 - OSHA 10-Hour Construction training
 - State of Michigan S-4 Water Distribution License or MWEA Collections Grade 1 certification
- Able to access and work in confined spaces. Able to understand, apply, and follow safe digging practices, and use appropriate safety equipment.
- Experience in construction and repair practices associated with asphalt, concrete, water, sanitary sewer, and storm sewer infrastructure.
- Able to work duty time on a rotating basis provided the employee demonstrates proficiency in public service operation and lives within the distance limit established by the state and in accordance with the collective bargaining agreement.

Public services—G-K classification requirements:

- Enroll in the Michigan Public Service Institute and complete within the required time frame.
- Possess and maintain one of the following, as directed by and based upon the needs of the department:
 - State of Michigan S-3 Water Distribution System Operator’s license
 - MWEA Collections Grade 2 certification
 - State of Michigan D Wastewater Municipal Operator’s license
 - State of Michigan F-4 Water Filtration Municipal Operator’s license
 - State of Michigan Pesticide Applicator Certification
 - American Society of Sanitation Engineers (ASSE) Backflow Prevention Assembly Tester 5110
 - National Association of Sewer Service Companies (NASSCO) Pipeline Assessment Certification (PACP), Manhole Rehabilitation (MR) Certification, and/or Cured in Place Pipe (CIPP) Certification

- Sacramento State College Operation and Maintenance of Wastewater Collection Systems Volume I
- Michigan Concrete Association (MCA) Concrete Flatwork Finisher Certification
- Ferris State University Hot Mix Asphalt Level 1 Certification
- International Society of Arboriculture (ISA) Certified Arborist
- Plumbing journeyman license
- Mechanical contractor license
- Michigan builder license
- Associate's degree

Utility plants—A–F classification requirements, dependent on area of expertise:

- Five years responsible work in utility plants or an equivalent combination of knowledge and experience in plumbing, electrical, HVAC, automotive, mechanical, or related field; or have obtained at least the “F” step of the maintenance technician 1 classification.
- Possess and maintain confined space certificate, Power Industrial Truck (hi-lo) certification, Lockout/Tagout certification, aerial lift training, and CPR certification.
- Possess and maintain one of the following, as directed by and based upon the needs of the department:
 - Michigan Water Environment Association (MWEA) Electrical Technologist Grade 1 or higher
 - MWEA Instrumentation Technologist Grade 1 or higher
 - MWEA Mechanical Technologist Grade 1 or higher
 - State of Michigan S-4 Water Distribution License
 - Completion of 6 courses in the Wastewater Resource Recovery Technician Program (WRRT)
- Obtain and maintain the following within one year of hire, as directed by and based upon the needs of the department:
 - Arc flash training
 - Current certificate for chlorine handling and awareness.
- Experience in materials, methods, practices, and equipment used in water or wastewater system operations. This includes operational characteristics, services, and activities of a water or wastewater system maintenance program.
- Extensive knowledge of chemical or other hazards including safety precautions of plant operation.
- Knowledge in electrical systems, theories, principles, and application including electrical systems and equipment including controls, motors, electronics, VFDs, MCCs, PLCs, and switchgear.
- Experience in instrumentation and electronics including the ability to calibrate, diagnose, test, and repair.
- Experience in installation and repair of complex machinery and ability to use precision tools. This may include centrifuges, centrifugal blowers, conveyors, hydraulics, drives, industrial pumps, micrometers, calipers, vibration equipment, and laser alignment equipment.

- Experience in HVAC systems, theories, principles, and application. Understand refrigeration recovery, evacuation and charging.

Utility plants—G-K classification requirements:

- MPSI enrollment
- Possess and maintain one of the following, as directed by and based upon the needs of the department:
 - State of Michigan S-3 Water Distribution License
 - State of Michigan F-4 Filtration License
 - State of Michigan D Wastewater License
 - Plumbing journeyman license
 - Mechanical contractor license
 - State of Michigan Master Mechanic License or ASE Master Technician Certification
 - American Society of Sanitation Engineers (ASSE) Backflow Prevention Assembly Tester 5110
 - MWEA Mechanical Technologist Grade 2
 - MWEA Electrical Instrumentation Technologist Grade 2
 - Refrigeration certification
 - Boiler Certification
 - Wastewater Resource Recovery Technician (WRRT) certified
 - Basic manufacturer training/certification in SCADA or PLC
 - Associate's degree

PHYSICAL DEMANDS AND WORK ENVIRONMENT: *The physical demands and work environment characteristics described here are representative of those an employee encounters while performing the essential functions of the job. A qualified individual with a disability must be able to perform the essential functions of the position with or without reasonable accommodation.*

While performing the duties of this job, the employee is regularly required to talk or hear. The employee is regularly required to communicate with others and view and produce written documents. While performing the duties of this job, the employee regularly works in the field and a maintenance facility and occasionally in a business office setting. The employee is frequently exposed to excessively noisy, wet, humid, snowy, and hot or cold conditions, and is occasionally exposed to noxious odors, dust, particles, or other adverse environmental conditions. The employee is frequently required to sit; use hands to finger, handle, or feel; and reach with hands and arms. The employee must frequently lift and move items of considerable weight. Bending, twisting, and stooping are also frequent requirements of the position. The employee may be exposed to uncontrollable environments, graphic scenes, and bio-hazardous or hazardous materials.

The employee frequently works near mechanical equipment and in excavations, confined spaces, and roadways. Work may involve working at various heights. The employee may enter residential, commercial, or industrial properties.

The employee is expected to work under deadlines with the potential for constant interruption and change. The employee may be required to work extended hours and may be called out or required to work in emergency situations. The employee must be able to perform manual labor for extended periods of time and under adverse climatic conditions. The employee is required to drive in inclement weather.